

REMARKS

In response to the Office Action dated May 25, 2001, Applicant respectfully request reconsideration of the present application in light of the foregoing amendments and the following remarks. Except for the extension of time fees referenced above, no additional fees are believed to be due at this time. Should additional fees be required, the Examiner is authorized to charge deposit account no. 50-2041 (Whitham, Curtis & Christofferson, P.C.).

Claims 36-42 are pending in the present application and all stand rejected.

I. The Prior Art Rejections

Claims 36-40 were rejected under 35 U.S.C. §103 as being unpatentable over Casey. Claims 41-42 were rejected under 35 U.S.C. §103 as being unpatentable over Casey in view of Bagg and Weeks.

A. Claims 36, 37, and 40

Claims 36 and 37 were rejected under 35 U.S.C. §103 as being unpatentable over Casey. These claims are directed to a mat that has a plurality of discontinuous reinforcement fibers and where the mat has at least a 9 to 1 (claim 36), or a 90% (claim 37) machine direction orientation. Claim 40 is directed to a product that comprises a plurality of mats having at least a 90% machine direction orientation. The Examiner asserts that Casey discloses that up to 20 to 1 machine to cross direction orientation is possible for wet lay process sheets and that it would have been obvious to have at least a 9 to 1, or 90% machine orientation sheets. Applicant disagrees.

As discussed in the parent case (U.S. Patent No. 6,066,235), the assertion in Casey that oriented products with a 20 to 1 machine-direction tensile orientation are possible, is unsupported mere conjecture that is not enabled by Casey. All of the arguments regarding Casey from the parent case are specifically incorporated here. Briefly, while Casey mentions that oriented products with a 20 to 1 machine-direction tensile orientation are possible, this statement is mere conjecture. Casey, or Heyse, the author of the chapter, did not offer a supporting reference or any other evidence for the 20/1 ratio. The key reference cited by Casey on orientation states that the maximum orientation used in the literature is 6:1 and not 20:1 as conjectured by Casey/Heyse. This referenced article states "[orientation] values of up to $a_z=4$ were reached. A further increase in the tensile strength relationship up to the maximum value cited in the literature for wet laid systems of $a_z=6$ *seems to be possible.*" (italics added)

Claims 36 and 37 are directed to a method for producing fibrous mats having at least a 90% machine direction orientation which is clearly not taught or obtainable by the disclosure of Casey.

Claim 40 has the additional requirement of a product comprising a plurality of mats, each having discontinuous reinforcement fibers having at least a 90% machine direction orientation which further distinguishes claim 40 from Casey.

D. Conclusion

For the reasons set forth above, Casey fails to teach a mat or a product have a plurality of mats that have at least a 9 to 1, or 90% machine direction orientation. Accordingly, it is respectfully asserted that claims 36, 37, and 40 are in condition for

allowance. Claims 38 and 39 depend from claim 37 and claims 41 and 42 depend from claim 40. For the reasons set forth with respect to claims 36, 37, and 40, claims 38, 39, 41, and 42 are likewise in condition for allowance.

It is respectfully requested that the present application be allowed and passed to issue.

Respectfully submitted,



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